EXHIBIT 2

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

IN RE: XCELERA.COM, INC.
SECURITIES LITIGATION

CIVIL ACTION NO.
00-CV-11649(RWZ)

CLASS ACTION

EXPERT REPORT OF SCOTT D. HAKALA, PH.D, CFA

I.   Background and Qualifications of the Expert

1. I am a director of CBIZ Valuation Group, LLC, a national business valuation and consulting firm that operates as a wholly owned subsidiary of CBIZ, Inc., a publicly traded business services firm (NYSE: CBZ). CBIZ Valuation Group is one of the largest business valuation and consulting firms in the United States with offices in Dallas, Chicago, Atlanta, St. Louis, Milwaukee and Princeton (New Jersey). CBIZ Valuation Group employs approximately 100 individuals providing business valuation services to public and private companies.

2. I received a Doctor of Philosophy degree in Economics and a Bachelor's degree in Economics from the University of Minnesota. I have earned the professional designation of Chartered Financial Analyst, awarded by the Association for Investment Management and Research. I have taught courses on asset pricing and market efficiency at the doctorate (Ph.D.) level in a Ph.D. granting institution. In addition, I have served as a consultant and expert witness on numerous occasions regarding economic issues similar

to those in this litigation. In February 2005, I testified at trial as to measures of damages, event studies and inflation per share in a class action securities fraud case and have been found qualified to testify at trial as to these matters in three other class action securities fraud cases within the past three years. I have extensive training in the trading of public securities, including knowledge of market makers, securities markets and the modeling of individual and institutional trading patterns. I have extensive training and experience with determining inflation per share and with event studies. A detailed summary of my qualifications, including prior testimony and articles, is provided on the curriculum vitae attached hereto as Exhibit A.

3. Plaintiffs are being charged fees for my services in this engagement based on my hourly billing rate of $525 per hour in 2007. I have received assistance from other staff employed by CBIZ Valuation Group. My staff bills at ranges between $70 and $340 per hour.

II.   Information Considered

4. My opinions are based on my professional experience, as well as a thorough review of a substantial amount of available materials, including the following materials which I considered in reaching my conclusions:

(a)   The Consolidated Amended Class Action Complaint ("Complaint") in this matter.

(b)   Rulings by the Court in this matter on the Motions to Dismiss and with respect to Class Certification.

(c)   Transcripts and exhibits from the depositions of: Karen Cronin; Jimmie Hicks; Douglas Horan; Lana Lyon; Christopher Dubrowski; Glover Powell; Miriam Raizner; Alexander Vik; and Gustav Vik.

(d)   All filings of the Company ("Xcelera," known at different times as The Scandinavia Company, Xcelera.com Inc. and Xcelera Inc.), with the

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Securities and Exchange Commission (SEC) from April 1999 through December 2001.

(e)   Published news articles and press releases and other public news regarding the Company from April 1999 through March 2003, found on Factiva, LexisNexis, the Yahoo!Finance Xcelera Message Board, the Internet and Bloomberg, L.P. (produced on a CD).

(f)   Analyst reports on the Company and selected analyst reports on various peer companies (CacheFlow, Exodus Communications, Akamai Technologies, Digital Island, InterNAP, and iBeam) for the period from April 1999 through December 2000 from Thomson Financial (produced on a CD).

(g)   Institutional trade data relating to Xcelera common shares between March 1999 and March 2001 provided by Thomson Analytical Research (produced on a CD).

(h)   Publicly available financial information and public trading price information on the Company, market indices and guideline public companies (identified later in the report), as found on Bloomberg. L.P. (produced on a CD).

(i)   Trading information from the Defendants and affiliates of the Defendants as obtained in discovery and identified in various public documents.

(j)   Various academic texts and published articles, as cited in the footnotes to the text.

III.   Summary of the Analyses and Conclusions

5.   For purposes of this opinion and report, and based on the information identified in

paragraph 4, I assume, as a general summary, the following:

(a)   On April 1, 1999, Xcelera made false and/or misleading representations regarding the acquisition of an interest in Mirror Image. The Company stated, "Following nine months of investments and work The Scandinavia Company (AMEX: SCF) now owns a majority interest in a leading Internet caching company, Mirror Image Internet, Inc. The amount of the investment and ultimate ownership percentage of The Scandinavia Company, Inc., cannot be determined at this time, but has been funded out of The Scandinavia Company's cash holdings. The Scandinavia Company is discussing arrangements whereby it would obtain full ownership of Mirror Image." In fact, the Company had agreed to provide only half of the funding to purchase the majority equity interest in Mirror Image, and

the other half of the funding was provided by others who were to be compensated in SCF stock or cash.

(b) On August 6, 1999, the Company made additional false and/or misleading representations regarding its acquisition of a controlling equity interest in Mirror Image. In this announcement, the Company asserted, "The Company acquired a 54.5% equity interest in Mirror Image Internet, Inc., a Delaware corporation ("Mirror Image"). Since the date of the agreement, the company has acquired an additional 32.0% of the outstanding equity of Mirror Image, such that, as the date hereof, the Company holds 86.5% of the issued capital stock of Mirror Image. The purchase price for the shares represented by the additional 32.0% interest is to be determined based upon the fair market value of Mirror Image at dates which are 6 months, 12 months, and 18 months from the date of such purchase. To the extent that the fair market value of Mirror Image may increase over such 18-month period, the company may be required to make significant additional investments in Mirror Image in the future. To date, the company's total investment in Mirror Image is equal to $5.95 million." The Company made a very similar statement again in its Form 20-F filed on August 13, 2000, asserting that $3 million of the $5.95 million investment was "advanced to the Company by affiliated entities." These disclosures did not reveal that Xcelera would have to issue substantial and dilutive additional shares to JAM Investments, Ltd. and Kahnberget Holding, Ltd. (referred to as "JAM") in return for the funds provided and did not disclose the effect that dilution might have on the shares of Xcelera. Contrary to the stated or implied facts, JAM and Kahnberget were not affiliated entities, and had not advanced the funds as a loan. Both statements failed to disclose that Xcelera had agreed to compensate JAM and Kahnberget for their investment by conveying to them Xcelera shares or cash equal to the value of 40% of Xcelera's investment in Mirror Image. Accordingly, JAM and Kahnberget were entitled to 40% of the value of Xcelera's approximately 86.5% ownership in Mirror Image, or approximately 34.6% of the value of Mirror Image, to be paid in Xcelera shares or cash.

(c) Between April and December 1999, the Company made a number of additional announcements and statements that touted its controlling interest in Mirror Image, and Alexander Vik and others confirmed the false and/or misleading information and repeatedly asserted the benefits of the Mirror Image investment to Xcelera without disclosing the substantial dilution of Xcelera's shares provided for in the agreement with JAM.

(d) Additional false and/or misleading statements were made in press releases and in interviews of Alexander Vik throughout the first half of 2000. These statements continued to assert that Xcelera had a controlling interest in Mirror Image and provided the shares outstanding of Xcelera without revealing the terms of Xcelera's understanding with JAM, without

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revealing that JAM had chosen December 31, 1999 to value 32.7% of Mirror Image and to receive shares of Xcelera of equivalent value, and without revealing the substantial potential dilution of shares as a result of the requirement to issue Xcelera shares to JAM.

(e)   The false and/or misleading representations continued through July and August. On July 31, 2000 (after the close of trading), the Company announced its results for the year ended January 31, 2000, and discussed its events to date. The weighted average basic and fully diluted shares were reported at 105.8 million, essentially stating that there was no dilution of the existing outstanding shares at that time and ignoring the agreement between JAM and Xcelera. In a Form 20-F issued after the close of trading on July 31, 2000, the Company disclosed additional details, stating, "We are also involved in another matter that may have a material adverse impact. In connection with our acquisition of Mirror Image common stock during the year ended January 31, 2000, we may be required to issue new shares of our common stock to certain third parties. The amount of shares would be calculated based on approximately 32% of the value of Mirror Image common stock at December 31, 1999. We cannot, at this time, estimate the number of shares that we may be required to issue. Although we are currently negotiating with such third parties to determine the valuation methodologies, there can be no assurances that any amount of shares that would be issued would not result in material dilution to the number of outstanding shares of our common stock and a corresponding material reduction in the value of our common stock, or have a material effect on our consolidated financial statements. In the event that we are unable to agree with the third parties on the valuation methodologies, it is likely that litigation will be commenced by the third parties. We have not included any provisions for any liability that may result from the issuance of our shares in our consolidated financial statements." However, the Company did not disclose that Xcelera had signed an agreement with JAM and Kahnberget on July 31, 2000 agreeing to issue shares, establishing a valuation process, and posting good faith collateral in the form of Xcelera shares equal to the approximate aggregate value of $100 million based on Xcelera's closing price on December 31, 1999. The Company also failed to disclose that VBI Corp. had agreed to transfer four million Xcelera shares to Kahnberget, and failed to indicate the true extent of the dilution likely to be realized by its shareholders.

(f)   Finally, on November 29, 2000, the Company filed a Form 6-K disclosing the actual terms of its agreement with JAM and revealing to a greater extent the process and actual risk of dilution to Xcelera's shareholders.

6. I performed an extensive event study analysis that examined the movements in Xcelera's share price as a function of identified news and disclosure events, returns provided by the NASDAQ Composite Index (CCMP) and returns from an industry/peer index based on returns to shares of eleven companies identified as peers of Xcelera or Mirror Image (Peer Index). This event study is summarized in Exhibit B-1. A more detailed event chronology is presented in Exhibit B-2. A Composite Index was created to provide a combined industry and market prediction of the movement of Xcelera's share price. The Composite Index was based on the CCMP and Peer Index and their respective coefficients in the regression analysis in Exhibit B-1. The Composite Index returns were compared with the returns on Xcelera's shares between April 1, 1999, and December 31, 2000, in order to isolate any idiosyncratic movements (abnormal returns) in Xcelera's share price and to provide a measurement of the effects of certain identified events.

7. Xcelera's share price increased dramatically in a series of events between April and December 1999. The increases in Xcelera's share price were associated with various news releases regarding Xcelera's shift to becoming an investor in and incubator of Internet-related companies, particularly Mirror Image, and news regarding a number of positive developments within Mirror Image. The combination of news regarding Xcelera's increased investment in Mirror Image and news regarding developments within Mirror Image were primary causes of the rapid increase in Xcelera's share price between April and December 1999. Also during this period of time, investors began to substantially reevaluate and favor companies involved in investing in Internet-related investments and companies involved in various Internet infrastructure development activities (including companies engaging in facilitating the faster flow of information on

the Internet through the caching of data and/or proprietary software designed to speed delivery of information). This reevaluation of the prospects for such companies led to rapid increases in the market values of such Internet-related companies, including Xcelera. The rise in Xcelera's share price and its controlling interest in Mirror Image led to substantial increases in investor interest in the Fall of 1999, including media coverage by investment commentators such as Jon Markman on MoneyCentral. This increased investor interest and media coverage further facilitated the rapid increase in Xcelera's share price, although some commentators (such as Paul R. La Monica on SmartMoney.com) tempered some of that increase. In December 1999, news of an investment by Hewlett-Packard and other positive developments within Mirror Image propelled the share price of Xcelera to even higher levels.

8. In January and February 2000, Xcelera's share price continued to rapidly increase on positive commentary in the news. This began with an assessment on January 5, 2000, by Markman on MoneyCentral that, "With a market cap of $1.7B, I think this one has a clear shot at $25B in market value, and potentially a lot more." Coverage of Mirror Image by George Gilder in his Gilder Technology Report lead to even greater increases in Xcelera's share price on February 17 and 18, 2000. Additionally, news of additional investments by Xcelera and developments within Mirror Image continued to lead to further share price increases.

9. On March 22, 2000, news of a significant investment by Exodus Communications to provide cash and stock to Xcelera in return for a 15% equity interest in Mirror Image appeared to validate investors' assessment of Mirror Image's prospects and led to an additional share price increase. Following this news, Alexander Vik was reported as

stating that Mirror Image will have a market value of $20 billion after it goes public later in the year. That statement and other assurances provided further fuel for the increase in Xcelera's share price.

10. In April and May 2000, the share price of Xcelera fell substantially, despite continuing positive news regarding Mirror Image and other affirmative announcements by Xcelera. The declines in Xcelera's share price were due to a combination of news regarding insider selling that began to cause investors' concerns, focus on the stock by short sellers, some negative media commentaries, and a general decline in the values of Internet-related companies, particularly Internet-related holding companies. However, in June 2000, Xcelera's share price recovered much of the loss realized in May as a result of positive industry/sector news and additional positive announcements regarding Mirror Image.

11. In July 2000, Xcelera's share price fell by more than 50% despite an announcement of a share repurchase program and other positive news regarding Xcelera's investments in Internet-related companies. These declines related in large part to a disclosure by Xcelera of a potential tax liability to US shareholders associated with the Exodus transaction and an analyst report issued by Lazard Freres rating the stock as underperform.

12. The first significant disclosure of the potential exposure of Xcelera's shares to substantial dilution associated with the JAM agreement occurred following Xcelera's earnings and news release after the close of trading on July 31, 2000. The news release claimed to contain a link to Xcelera's Form 20-F dated July 31, 2000. Initially, the positive news release led to a significant increase in Xcelera's share price to as high as

$20 on August 1, 2000. However, in reading the Form 20-F, analysts and other commentators first learned of the exposure of Xcelera's shares to substantial dilution and other significant risks associated with Xcelera and began to describe these risks during trading and after the close of trading on August 1, 2000. These concerns led to significant declines in the stock price in the second half of trading on August 1 and during trading on August 2, 2000. Further commentary on the potential dilution related to the agreement with JAM occurred late on August 8 and on August 9, 2000, with one commentator estimating the exposure to be as much as 45 million shares or $622 million in stock. This commentary led to another significant decrease in Xcelera's share price on August 9 and 10, 2000. The following week the Company's announcement of its plans to pay a dividend to cover any individual tax liabilities in the US led to a significant increase in Xcelera's share price on August 14, 2000.

13. News and rumors of a significant event for Mirror Image helped to again increase significantly Xcelera's share price between August 21 and September 5, 2000. However, the continued decline in market values of Xcelera's peers led to a decline in Xcelera's share price from over $26 on September 5, 2000, to under $11 by November 10, 2000.

14. Then, on November 29, 2000, the filing of a Form 6-K by Xcelera disclosed for the first time the actual agreement with JAM and set forth in greater detail information regarding the potential consequences of that agreement. This disclosure caused another significant decline in Xcelera's share price on November 29, 2000.

15. My event analysis found that investors and analysts generally evaluated Xcelera as though it owned most of Mirror Image (owning at least 50% of Mirror Image from April 1, 1999 and August 5, 1999; between 86% and 90% of Mirror Image from August

6, 1999 and March 21, 2000; and between 73% and 78% of Mirror Image from March 22 and December 31, 2000) and did not consider the potential dilution of Xcelera's shares associated with the JAM agreement. This changed between August 1 and 9, 2000 with investors beginning to significantly discount Xcelera's share price as a result of the potential dilution of shares to be issued to JAM. Investors further discounted Xcelera's share price after the disclosure on November 29, 2000 of the terms of the JAM agreement.

16. In the event study analysis, I found that the corrective news and information and the collateral damage of that information on the credibility of Xcelera's management (including the potential contingent liabilities associated with litigation) between August 1 and November 29, 2000, led to at least a 36% cumulative net decline in Xcelera's share price.

17. I similarly evaluated the consequences of the JAM agreement in terms of its dilutive effect on Xcelera's share price. I concluded that the dilutive effect would be approximately 35.7% (32.7%/90.6% - representing approximately 48 million potential Xcelera shares that would have to be issued to JAM) using an equitable and consistent valuation methodology for valuing both Xcelera and Mirror Image and taking into account Xcelera's fully diluted shares as of December 31, 1999.

18. In Exhibit C, I utilized the event study in Exhibit B-1 to develop an estimate of the true value of Xcelera's share price after adjusting for the effects of corrective events. The inflation in Xcelera's share price is merely the difference between the market price and the "true value" for Xcelera's shares determined by my analysis on each trade date. The exact methodology for determining the true value in Xcelera's share price over time,

- as set forth and summarized in Exhibit C, is the "residual returns" (or "backwardization") method commonly employed by experts. As can be seen in the chart provided in Exhibit C, despite positive news events that potentially offset the negative, corrective information, Xcelera's share price fell substantially more than the Composite Index between April 28 and December 31, 2000. As a result, the true value line more closely corresponds with the Composite Index than Xcelera's share price.

19. I used the out-of-pocket method for calculating damages per share. The out-of-pocket measure generally provides that damages are best measured by the inflation per share at the time of purchase minus the inflation per share at the date of sale, or, in the absence of a sale, after the last corrective event. The out-of-pocket measure of damages is the economically correct, "proximate" measure of "actual damages." This is because the out-of-pocket measure, in most instances such as in this case, will correctly measure the materiality of the false and/or misleading information and will, thus, isolate those losses attributable to the fraud as opposed to solely due to other, non-fraud related events, and restore the investor to the position that would have been realized had the fraud not occurred.

20. Counsel informed me of their intent to move for modification of the Class Period to extend it from April 1, 1999 through August 8, 2000 to April 1, 1999 through November 29, 2000. Accordingly, I have performed my analysis under both the current certified Class Period and the proposed extended Class Period. It is my understanding that the Plaintiffs may choose to present evidence on inflation per share but not aggregate damages at trial. However, for information purposes aggregate damages are estimated in Exhibits E-1 and E-2 for identified institutional and non-institutional shareholders based

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on the inflation per share analysis in Exhibit C. Exhibit E-3 presents the combined results from Exhibit E-1 and E-2 for all shareholders. Consistent with my understanding of the Private Securities Litigation Reform Act of 1995 (PSLRA) and other legal limitations, damages were limited to those eligible shares purchased during the extended Class Period that realized an actual investment loss and were sold or held on or after August 1, 2000. In total, eligible damages amounted to approximately $352.6 million for shares purchased during the proposed extended Class Period and sold on or after August 1, 2000. Eligible damages amounted to approximately $302.6 million for shares purchased during the certified Class Period and sold on or after August 1, 2000. The specific methodology for estimating aggregate damages was the multi-trader model advocated and commonly used by a number of experts in securities litigation and has been validated by my recent comparison with claims data in cases I have been involved in. The total number of damaged shares was determined to be approximately 32.4 million in the Class Period as proposed and 28.4 million in the currently certified Class Period.

21. In Exhibit F, I provided additional analyses of insider trading during the extended Class Period. Exhibit F-1 provides an estimate of the gains realized on identified sales of shares by the Defendants based on the inflation per share at the time of each sale. The total inflationary benefit was estimated to be $90 million out of total proceeds of $252.5 million. Additionally, the Defendants were involved in aggressively selling call options. A call option is a right to purchase a share or given number of shares for a given price by or on a specified future expiration date. A seller, or writer, of a call option, especially a covered call (which means that the investor owns the shares subject to the option)

receives an initial premium and profits when the share price subsequently falls in value. Selling covered call options is a form of a limited risk short strategy, betting that the stock price will fall. As shown in Exhibit F-2, the Defendants sold a total of 36,532 contracts for total proceeds (net of fees and commissions) from such call options sales of approximately $16 million. My analysis found that each of the call options sold by the Defendants had essentially no true value at the time of sale.

22. The methodology for estimating relative and absolute inflation in Xcelera's share price provided in Exhibits B and C represents a framework for estimating inflation per share throughout the Class Period and estimating damages. The calculations in Exhibits B, C, E and F can be adjusted to accommodate different assumptions as to the relevant (corrective or inflationary) events and the proportion of such relevant events may be determined to be corrective or inflationary in nature. Thus, I may, if called upon in trial, provide different demonstrative calculations of inflation per share and inflation estimates in Exhibits B and C and possibly different damage estimates in Exhibits E and F to accommodate various alternative assumptions and to provide indications as to the sensitivities of the various calculations to various changes in assumptions. I would also be able to calculate the interest owed on any judgment obtained by Plaintiffs at trial using the applicable interest rates and relevant time period at the time of judgment.

23. Based on the event study and market analysis described in this report and my prior testimony, I conclude that Xcelera's stock traded in an efficient market during the current Class Period and the proposed extended Class Period. The event study analysis performed in this report was more thorough and, thus, further strengthened and confirmed my prior conclusions as to market efficiency.

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24. I also anticipate reviewing other expert reports in this case and, if necessary, addressing any additional information that may result from such review and discovery.

IV.   Further Discussion and Analysis

Materiality

25.   For purposes of this opinion, information is deemed to be material if "there [was] a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available."[1]

26. In general, investors and analysts base their evaluation of a company's value and the appropriateness of purchasing shares in a company on the company's ability to reliably produce earnings (or cash flow) relative to other companies and general securities market information.[2] This evaluation is primarily determined by analysts and institutional investors based on representations of and interviews with management (including quarterly conference calls following earnings announcements), company releases, and disclosures in various filings with the SEC.[3] Individual investors then rely upon such information and the recommendations of analysts and institutional investors in forming their opinions and in making investment decisions.

27. As the event study illustrates, the allegedly false and/or misleading statements were extremely material to investors in Xcelera shares. Xcelera was evaluated on its

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[1] *Basic Inc. v. Levinson*, 108 S. Ct. 978 (1988) at 983.
[2] AIMR, *Standards of Practice Handbook*, 1996, pp. 73-74; *AIMR Corporate Disclosure Survey, A Report to: AIMR*, Fleishman-Hillard, February 2000.
[3] *AIMR Corporate Disclosure Survey, A Report to: AIMR*, Fleishman-Hillard, February 2000, pp. 12-14. The sources of information cited in a survey of analysts as "extremely" or "very important" included: company executives (74%); annual report (71%); news releases (71%); quarterly reports (66%); conference calls (54%); and regulatory filings (52%).

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potential as a holding company with significant investments in Internet-related companies. Since these Internet-related companies were primarily still in various stages of product, software and customer development, they were evaluated based on their potential values with reference to other similar publicly-traded companies. For companies at earlier stages of development but with substantial future prospects, precise valuation is difficult and this uncertainty can lead to substantial share price volatility. As a result, relatively modest changes in growth and earnings expectations can lead to greater relative valuation changes. Nevertheless, there was sufficient information on Mirror Image and comparisons of Mirror Image and Xcelera's other company investments with similar publicly-traded companies for investors to evaluate Xcelera over time, especially throughout 2000. Xcelera's share price, thus, tended to track the valuation of certain Internet-related public companies in the absence of company-specific news events and traded with reference to a few publicly-traded companies. This tracking of share price movements against the Composite Index (R-squared in excess of 30% on non-event days) is consistent with an efficient market, especially after August 1999.

28. Given the valuation of Xcelera based on its investments in Internet-related companies and the substantial portion of that valuation attributable to Mirror Image, the percentage of Mirror Image owned by Xcelera and the number of fully diluted shares outstanding were both essential components of investors' valuation process. I determined that the number of fully diluted common shares of Xcelera as of December 31, 1999, was approximately 134.24 million. This was calculated based on approximately 105.83 million outstanding shares plus 25.94 million equivalent shares based on converting 26.25 million vested options into common shares at their respective conversion prices

and plus 2.47 million equivalent shares based on 3.61 million warrants associated with preferred share rights.[4] The total market value of Xcelera of $2,341.12 million was based on a last price on December 31, 1999 of $17.44 per share times 134.24 million fully diluted shares. The total cash and other investments less relevant liabilities within Xcelera were estimated based on the reported January 31, 2000 balance sheet to be $23.83 million. This implied a valuation of Xcelera's interest in Mirror Image of $2,317.29 million. Xcelera owned approximately 90.6% of Mirror Image, making a 32.7% interest worth approximately $836.37 million.[5] At $17.44 per share that translates into approximately 47.96 million shares of Xcelera. This implies a dilution of 35.7% of Xcelera shares, calculated as 47.96/(134.24+47.96).

29. My review of the news and commentary found that investors and commentators did not interpret or believe the potential obligations of Xcelera represented a significant risk of dilution. For example, the Lazard Freres report in July 2000 assumed that Xcelera owned approximately 78% of Mirror Image and valued Xcelera's common shares on that basis.

Event Study Summary

30. Materiality is often assessed in the context of an event study. An event study is based on a market model. A market model is a model of how the price of a security (in this case, the price of Xcelera's publicly traded common shares) moves in relation to a

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[4] This is slightly conservative to the extent that the options have greater values than their respective intrinsic values. Given that the subject options and warrants were deep-in-the-money, the additional option value above the intrinsic value was relatively modest.

[5] While some would argue for applying marketability discounts to this value, such discounts are generally viewed as inappropriate or inequitable especially when the party has specified redemption rights and/or rights to convert into publicly-traded common shares. Since the valuation of Xcelera shares are on a minority interest basis with a known controlled shareholder (VBI), no additional discount for lack of control would be warranted.

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market index and/or an index of peer group companies and responds to news and information.

31. The event study that I conducted in this case is composed of three stages. The first stage was the identification of material events. The intent of this step of the event study analysis was to control for all days when potentially material information came into the market.[6] The available public information was reviewed to determine information that investors would find to be material to Xcelera on a qualitative basis.[7] This information included analysts' reports, press releases, securities filings,[8] news articles (newspapers and daily publications, as well as more general publications), and Internet news announcements.[9] This component of the event study was compiled through a "blind" data selection process, meaning that the information likely to be new and material was selected for inclusion in the study without access to or reference to the actual stock price reaction on the corresponding dates. As a natural consequence of this, as with any truly

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[6] As long as there are sufficient degrees of freedom, the addition of more events (over-identification of events) will ensure a set of "clean" observations in the control sample of "non-event days" and avoid contaminating the market model estimates. Thus, adding "too many" events ensures the relative absence of bias and ensures consistency of the estimates but at some slight loss of efficiency. See, for example, Intriligator, *Econometric Models, Techniques, and Applications*, 1978, pp. 188-189, and Pindyck and Rubinfeld, *Econometric Models and Economic Forecasts*, 1991, p. 162-166.

[7] The list of material items relied upon is based on the NASDAQ guidelines as recognized by the SEC in *Federal Register*, Vol. 67, No. 157, August 7, 2002, pp. 51306-51310. We then added third party news reports, analysts' reports and insider trading events to that list consistent with the academic studies. The dates identified as having potentially material news events and, therefore, associated with indicator variables are listed in Exhibit B-1.

[8] Most securities filings, including Form 10-Ks and 10-Qs and 8-Ks, are routine and/or duplicate previously disclosed news. Thus, only when a news article or analyst mentions something surprising or new in such filings are they customarily identified as possible events for the purposes of this study. In this case, the securities filings tended to have important information and were, accordingly, included in the analysis.

[9] In this case, Xcelera was one of the more actively followed stocks on the Yahoo!Finance bulletin board but such posts were only reviewed in selected time periods to verify the reasons for significant share price movements. See Antweiler & Frank, *Is All That Talk Just Noise? The Information Content of Internet Stock Message Boards*, J. FIN., June 2004, at 1259-1294 ("We find that stock messages help predict market volatility. Their effect on stock returns is statistically significant but economically small."). I did not assume that posts by investors necessarily would explain stock price movements. Rather, I found that such posts indicated the kinds of information leaking into the market, the timing of news and the general opinions of various investors and, therefore, were useful in assessing materiality and in identifying news events and leakage that might have been missed in the search through traditional regular news sources.

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"blind" data selection process, there are certain dates on which Xcelera's stock price moved in a significant manner, but which do not appear to be correlated to identified news events for that day. Similarly, many identified potentially material dates will not lead to significant relative stock price movements (either because the news on those dates was mixed, the news was already anticipated, or the news did not otherwise significantly alter the consensus of investors) but may lead to increased trading volume.

32. The second stage of the event study involved the identification and analysis of possible market indices and guideline or peer group companies relative to the returns of Xcelera's shares. The purpose of this stage of the study is to control for the movements in Xcelera's share price that can be explained by the movements in market and industry share prices of other companies and to isolate the effect of each event on the share price of Xcelera.

33. The third stage of the analysis involved analyzing the candidate events (identified in stage one) in an integrated event study regression that explicitly corrected for changes in volatility during various time periods over the study period in this case. I used the integrated regression, or event parameter, approach.[10] This approach was selected because ·

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[10] In creating a precise, reliable market model required for an event study, one should account for the effects of all significant company-specific news events during the study period, even news unrelated to the subject of interest. This is done using dummy or indicator variables integrated into the market model regression to capture and control for the effects of company-specific events. In a chapter of the textbook *Market Models: A Guide to Financial Data Analysis, 2001*, Alexander explains (p. 441), "Dummy variables should be viewed as necessary measures for data that have structural breaks, regime shifts or seasonalities. If dummies are omitted there will be residual problems that lead to inefficient parameter estimates on the real explanatory variables." In other words, if there are significant news events that caused the stock price of Xcelera to move on specific days (both related and unrelated to the allegations in this case), it is necessary that one capture the effects of such news events with dummy variables on the appropriate dates in order to have a reliable analysis. Alexander specifically states (p. 440), "...[O]ne might consider creating a dummy variable to model the timing of important news announcements,...Structural break dummy variables are important whenever the data covers a permanent shift arising from a change in regime, or a temporary shift due to an extreme market movement. Dummy variables should be used prudently and only if there is a real reason, such as an important news announcement...." Consistent with this, I only included dummy variables in my event study for news events specifically related to Xcelera

the older "two-pass" cumulative abnormal returns (CAR) approach to event studies can

often be a biased and inconsistent approach to analyzing events.[11] The integrated

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(that were identified *a priori* without reference to the actual price movements of Xcelera's shares) that were, in the context of this study, deemed important (material).

Many academic articles discuss the use of dummy/indicator variables to capture the effects of events including: Larcker, Gordon and Pinchea, "Testing for Market Efficiency: A Comparison of the Cumulative Average Residual Methodology and Intervention Analysis," *Journal of Financial and Quantitative Analysis*, June 1980, pp. 267-287; Box and Tiao, "Intervention Analysis with Applications to Economic and Environmental Problems," *Journal of the American Statistical Association*, March 1975, pp. 70-79; Binder, "Measuring the Effects of Regulation with Stock Price Data," *The RAND Journal of Economics*, Summer 1985, pp. 167-183; Karafiath, "Using Dummy Variables in the Event Methodology," *The Financial Review*, August 1988, pp. 351-358; Malatesta, "Measuring Abnormal Performance: The Event Parameter Approach Using Joint Generalized Least Squares," *Journal of Financial and Quantitative Analysis*, March 1986, pp. 27-38; Marais and Schipper, "Chapter 17A: Event Study Methods: Detecting and Measuring the Security Price Effects of Disclosures and Interventions," *Litigation Services Handbook: The Role of the Financial Expert*, Third Edition, 2005 Cumulative Supplement, pp. 17A-15 to 16, 18 and 22 to 23 (discusses the 'event parameter" method, the use of the method to accommodate multiple events and in managing more complex modeling issues); and Dufour, "Dummy Variables and Predictive Tests for Structural Change," *Economics Letters*, 6, 1980, pp. 241-247. (Marais has served as a consultant and co-expert in two securities cases in the past year in both testing and validating my methodology.) Examples in textbooks discussing using dummy indicator variables to capture events in time include: Pindyck & Rubinfeld, *Econometric Models & Economic Forecasts*, 1991, pp. 104-108; Spanos, *Statistical Foundations of Econometric Modeling*, 1986, pp. 536-539 (and as part of a continuing example of modeling money holding behavior in a dynamic, time-series regression); Enders, *Applied Econometric Time Series*, 1995, pp. 243-249 (discusses structural change in unit root time-series and uses dummy variables to test for and adjust for structural change or level shifts in such series); Intriligator, *Econometric Models, Techniques, and Applications*, 1978, pp. 58-61, and Campbell, Lo and Mackinlay, *The Econometrics of Financial Markets*, 1997, p. 167.

[11] The traditional CAR analysis fails to control for company-specific news and, thus, provides a misspecified test in that it consistently fails to control for the factor it seeks to test and, thus, improperly formulates the hypothesis test, especially in a single company event study analysis.

There is substantial general and specific literature in the statistics, economics and finance fields discussing the problems that can arise in the traditional two-pass CAR methodology. See, for example, Larcker, Gordon and Pinchea, "Testing for Market Efficiency: A Comparison of the Cumulative Average Residual Methodology and Intervention Analysis," *Journal of Financial and Quantitative Analysis*, June 1980, pp. 267-287. The authors in this paper state (p. 267), "The objective of this paper is to suggest that the traditional CAR methodology is often inappropriate and that *intervention analysis* [italics in original] is a possible alternative. Where the systematic risk (i.e. Beta) of a firm change as the result (or in anticipation) of an announcement, the cumulative average residual methodology will result in biased residuals. ...Intervention analysis, on the other hand, can separate such risk changes from the information content of the announcement. In addition, intervention analysis also allows the observed auto-correlation in the market model residuals to be removed, thus providing improved beta estimates required for reliable statistical testing." Franses in *Time Series Models for Business and Economic Forecasting*, 1998, recommends "intervention" analysis (p. 130) consistent with Box and Tiao (1975) and points out the statistical problems that arise when one does not capture the effects of known events (with dummy variables) or "neglects them" (pp. 128-129). He states (p. 144), "With *a priori* knowledge of specific events and approximate dates which may yield aberrant observations (...), it is not difficult to examine their relevance for a model that will be used for forecasting. We can simply extend our model with additional regressors, such as the dummy variables.... Standard tests for significance can then be used to decide which regressors are potentially important for forecasting," In other words, not only should a researcher use *a priori* information to identify possible events for inclusion in the regression analysis as dummy variables, but should then test to determine whether such dummy variables should be included in the final analysis.

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regression approach yields consistent and unbiased estimates of both the market model and the effects of events over the period of interest.[12] After identifying all candidate events, the measured effect of each candidate event is analyzed in the context of daily returns.

34. The event study summarized in Exhibit B-1 is based on the returns generated by Xcelera's shares on a daily basis from April 1, 1999, through December 31, 2000 (the "Study Period").[13] The market model portion of the analysis is based on the NASDAQ Composite Index (CCMP-which tended to reflect technology stocks) and a peer company index (SUBINDEX) based on the equally-weighted geometric average returns of shares from Inktomi Corporation (INKT), CMGI Inc. (CMGI), GSV Inc. (GSVI), Safeguard Scientifics Inc. (SFE), Exodus Communications (EXDSQ), Internal Network Services

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The bias and inconsistency problems associated with the two-pass or CAR event analyses are particularly significant in single company event studies. First, the "clean period" required to obtain estimates of the standard errors and the coefficients of the market model in the CAR methodology is almost never really clean in a statistical sense. Clean in a statistical sense implies few or no significant company-specific events and a properly specified market model. Because company-specific events are common in stock price return data, the residuals during the candidate "clean period" are usually not normally distributed (fat tails or kurtosis is common) and the estimated market model is biased and inconsistent due to an *omitted variables problem*. These problems lead to overstated standard errors and understated t-statistics during the event analysis stage of the two-pass methodology. Additionally, fundamental changes in the businesses of a company and its peer companies over time can render the market model coefficients in the "clean period" inapplicable to or biased relevant to the estimation period. (See, for example, Marais and Schipper, "Chapter 17A: Event Study Methods: Detecting and Measuring the Security Price Effects of Disclosures and Interventions," *Litigation Services Handbook: The Role of the Financial Expert*, Third Edition, 2005 Cumulative Supplement, pp. 17A-16 to 21, wherein they discuss the problem of low "power" in single company event studies and the problem of "interventions" in the estimation period yielding "unstable results".) Second, the market model in the two-pass CAR methodology is often estimated using a daily returns series. The low percentage of variance explained by the market model (low R-squared of 15% or less) leads to an unfavorable (low) signal to noise ratio and will tend to cause the market model coefficients to be understated or inaccurate even if the omitted variables (omitted company-specific events) did not cause them to be biased. For this reason, beta estimates are preferably made using longer return windows until the R-squared improves or the estimation of the market model must be made in a regression with the company-specific events included as indicator or dummy variables. See Franses in *Time Series Models for Business and Economic Forecasting,* 1998, pp. 128-129.

[12] See the references and discussions in the two prior footnotes.

[13] The integrated approach, especially with a large number of events controlled for in the analysis, is performed over the period of interest and often includes (as controls) the period one year prior to the Class Period and one year after the Class Period. In this particular case, the study period begins immediately after the announcement of Xcelera's investment in Mirror Image and ends approximately one month after the last corrective event on November 29, 2000.

Corporation (INAP), CacheFlow Inc. (CFLO, renamed to BCSI), Digital Island Inc. (ISLD), IBEAM Broadcasting Corporation (IBEMQ), Internet Capital Group Inc. (ICGE), and Akamai Technologies Inc. (AKAM).[14] This combination provided the best fit in explaining the market and industry components of Xcelera's returns over the study period. Collectively, the peer index and the market index could explain 29.8% of the daily variance in Xcelera's stock price returns on non-event trade days during the Study Period and 15.9% of the daily variance in Xcelera's stock price returns on all trade days during the Study Period. In my experience, these are reasonably high percentages and reflect the extent to which industry news events and market events were influencing share prices for companies such as Xcelera during the Study Period. The peer index and the market index were combined using the coefficients from Exhibit B-1 to produce a Composite Index that provided a predicted movement in Xcelera's share price on each observation day and was used as the reference point for determining inflation per share and damages.

35. I considered and rejected a number of other market and industry indices and guideline companies, including: CITN; AMZN; ELNK; YHOO; ZANE; INTA; SPX; MSFT; EBAY; TT; RNWK; and FFIV. The aforementioned rejected indices and companies failed to provide a significant incremental explanation of the returns from Xcelera's common shares.

36. The regressions summarized in Exhibit B-1 were based on the daily returns in natural log format. However, the event effects are summarized in percentage format in

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[14] These companies were often noted during my event search as having stock prices that moved in sympathy with or were correlated with Xcelera. To the extent a company was not publicly traded throughout the Study Period, the daily stock price return for that company was included in the geometric average only five days after the first reported closing price.

Exhibit B-1 for ease of interpretation. The event coefficients printed out in Exhibit B-1 are also adjusted for the negative constant term.[15] Jointly, the two indices are significant at greater than the 99.9% confidence level. Similarly, all events chosen and the "relevant" events (those events that relate to facts alleged by the Plaintiff) were each jointly significant at greater than the 99.9% confidence level. The negative constant is economically significant over time and suggests some erosion in Xcelera's share price over time relative to the Composite Index not explained by the identified events.

37. The t-statistics reported for the various event dates are based on the standard errors reported from the regression results adjusted for the negative constant term. For individual events, statistical significance will be set based on a t-statistic of 1.65 in absolute terms (a 90% confidence level using a two-tailed test, 95% confidence using a one-tailed test).[16] Individual events that were not statistically significant should, nevertheless, remain in the regression results and affect the overall analysis because they are part of the entire event selection process.[17] Otherwise, the exclusion of such

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[15] The constant is a trend term. Where the trend is not constant over time, one cannot assume that the trend will continue in any definite direction on any given date. Furthermore, a trend (or drift) term would suggest that an investor in Xcelera would know and expect Xcelera to significantly underperform its peers and the Composite Index over time and is, therefore, inconsistent with an efficient market.

[16] Statistical significance has more than one meaning and is not a talismanic term. See David H. Kaye & David A. Freedman, Reference Guide on Statistics, in *Fed. Jud. Ctr., Reference Manual on Scientific Evidence*, pp. 83 and 123-27 (2d ed. 2000) (discussing practical significance); Alan Stuart, et al., *Kendall's Advanced Theory of Statistics, Volume 2A: Classical Inference & The Linear Model*, p. 193 (6th ed. 1999) ("This numerical convenience [rule of thumb criteria for statistical significance] has persisted long beyond its hour of need."); Lapin, *Statistics for Modern Business Decisions*, p. 186 (1978) ("A decision rule must be chosen that will provide a lower probability of the more serious error . . . . He [the decision-maker] should therefore be wary of setting Alpha [the criteria for significance] and Beta at arbitrary or traditional levels."); Berry and Lindgren, *Statistics: Theory and Methods*, pp. 423-27 (2d ed. 1996) (arguing against a fixed criteria for statistical significance and for considerations of practical significance); and Cassidy, *Using Econometrics*, pp. 129-138 (1981) (describes the setting of confidence levels at the 10% rejection rate and "One-sided tests should be used whenever the researcher's prior permit.") An event with a t-statistic of 2.33 or greater in absolute terms is often considered "highly significant" at the 99% level, and an event with a t-statistic greater than 3.0 is often considered "extremely significant" or an "outlier" that is so significant its existence is rare absent some actual event and inconsistent with random noise derived from the normal distribution given the number of degrees of freedom.

[17] Cassidy, *Using Econometrics*, pp. 252-253 (1981) discusses the problem with selectively deleting

intervention variables may alter the statistical inferences. Events that have a t-statistic of greater than one in absolute terms are viewed as "meaningful" in that these events improve the overall "information" in the study and, all else being equal, were more probable than not, given the prior selection process, to have had some impact on the price of Xcelera's shares.

38. Although the identified events (129 in total) accounted for only a fraction of the total trade days considered in the analysis (443 observations), they jointly explained most of the variance in Xcelera's share price not already explained by market and industry indices throughout the study period. An F-test is a conservative test for the statistical significance of a group of events or explanatory variables. The F-test for significance of the identified events suggested a confidence level in excess of 99.99% for the identified events.[18] Thus, the share price of Xcelera reacted more and was significantly more likely to change in relative terms on identified event days than on non-event days.

39. The events identified are summarized in Exhibits B-1 and B-2. Most of the events are self-explanatory. Therefore, the analysis in the following section will focus primarily on the relevant corrective events in 2000.

40. The event study and event chronology summarized in Exhibits B-1 and B-2, respectively, further support my previous conclusion that the market for Xcelera's common shares was efficient during the certified Class Period and during the proposed extended Class Period. There was more than adequate market value and float to attract active investor and market maker interest. The turnover of the shares in the public float was consistent with an actively traded common stock. Additionally, Xcelera was

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intervention variables that are insignificant from the analysis and discusses the use of collective (joint) tests for the inclusion of groups of intervention variables as a whole, rather than individual interventions.
[18] $F(129,311) = 6.73427$ with Significance Level 0.00000000.

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frequently the subject of public commentary and news throughout the certified Class Period and the proposed extended Class Period. This public commentary and news then was reflected in extremely active investor commentary on the news and the prospects for Xcelera (particularly its investment in Mirror Image) on Internet bulletin/message boards throughout the proposed extended Class Period. Finally, the trading volume and stock price movements of Xcelera's shares were greater on identified event days than on non-event days, particularly on days when one would expect to observe significant investor responses to the news. In addition, I tested and found that there was no systematic ability on the part of investors to anticipate or exploit public information or the stock price movements of Xcelera. All of these factors provide strong evidence of an informationally efficient market for Xcelera's common shares.

Inflation Per Share Analysis

41. Economic loss causation is based on the portion of the loss in share price (assuming the shareholder purchased and sold the shares in the same amounts and at the same times, but at the "true" values instead of at the inflated prices) that would not have occurred had the truth as alleged by the Plaintiff been disclosed in a timely manner. Fraud infuses material information that is false into the mix of information underlying the stock price (or omits to state material information); the market values that false information or omission; and the stock price is artificially inflated. The value of the false information (or the value incorrectly attributed to the price because true information is withheld) is sometimes referred to in securities litigation as the "inflationary component" of the price, or the "inflation." The stock then moves through the marketplace with both a true value and an inflation component, the latter of which is based on the fraud. The

stock's "absolute" price—the dollar amount at which it is actually trading in the real world—is composed, in other words, of two parts: true value and inflation.

42. "Inflationary loss" means the loss due to the fraud and is measured by inflation on the day of purchase minus inflation on the day of sale (or measuring date, if not sold before 90 days after the end of the Class Period).[19] Because the class includes all shares purchased by qualified individuals, inflationary loss is measured on a per share basis because, had the truth been disclosed sooner and the share price been lower, the class would have paid a lower price per share on each day.[20]

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[19] This damage measure is well recognized and has been consistently applied by experts in securities litigation. Additionally, there are strong economic arguments as to why the inflationary loss is always a "reasonably foreseeable" loss and always caused by the fraud, notwithstanding the operation of the market or other events upon the inflation in the stock price. This damages measure is sometimes referred to as the "out of pocket" rule, but that term, too, can be confusing and it is used in different ways. The "out of pocket" rule is set forth in variety of places, including: *Restatement of the Law, Torts, Second,* American Law Institute, 1977, Section 549; Page Keeton, et al., *Prosser and Keeton on The Law of Torts,* Fifth Edition, 1984, Section 110, pp. 767-777. Recent cases where I have testified and this method of calculating damages has been allowed include: *In re Broadcom Sec. Lit.* (Approval of plan of allocation over objections September 2005); *In re Raytheon Sec. Lit.* (June 2004 bench ruling and later approval of plan of allocation after settlement); and *In re Clarent Sec. Lit.* (January 2005 ruling on motions in limine and trial testimony February 2005). For references by economic experts, see, for example, Michael Barclay & Frank C. Torchio, "A Comparison of Trading Models Used for Calculating Aggregate Damages in Securities Litigation," 64 *L. & Contemp. Probs.,* pp. 105-106 (2001) (stating: "In general, damages per share are calculated as the artificial inflation when the shares were purchased minus the artificial inflation when the shares were sold."); John Finnerty & George Pushner, An Improved Two-Trader Model for Estimating Damages in Securities Fraud Class Actions, 8 *Stan. J. L. Bus. & Fin.,* p. 213 (2003)(discussing a damage model that measures damages based on inflation at time of purchase minus inflation at time of sale and allows for "in-and-out" or selling damages); Bradford Cornell & R. Gregory Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," 37 *UCLA L. Rev.,* pp. 883 and 885-86 (1990) (". . . the measure of damages for an investor is simply . . . , for plaintiffs who sold their securities before the [final] corrective disclosure, the difference between the price inflation at the time of purchase and the price inflation at the time of sale."). The same measurement is applied to holders of stock through the end of a class period – inflation at the time of purchase minus inflation at the date of measurement. The PSLRA also contains a cap on damages based on a 90-day look back period at the end of a class period. 15 U.S.C. §78u-4(e).

[20] Share purchases by certain institutions and funds are driven by the market value of the float relative to a target market of shares as a whole such that, if the truth was disclosed and the market value of the float declined, the total purchased amount in dollars would be reduced and the number of shares purchased would be the same. Shareholders typically purchase set numbers of shares in orders divisible by 100. If, in contrast, one assumed fixed dollar amounts of purchases, then had the share price been reduced by the disclosure the total dollar amounts of the purchases, there would not have been enough shares for the entire class to purchase shares of Xcelera in the hypothetical alternative world.

43. I divide the total investment loss realized on a share purchased during the Class Period into two parts: (i) that portion of the investment loss that is due primarily to forces and events that would have occurred regardless of any wrongful acts and omissions, and (ii) that portion of the investment loss that relates to the inflation in the share price being dissipated and, therefore, solely attributable to the allegations of wrongful acts and omissions (as evidenced by the market's reaction to the disclosure, or materialization, of the previously concealed or understated risk of the relevant truth).

44. The investment loss (often referred to as the loss attributable to "transaction causation") is the difference between the price paid for a share upon purchase during the Class Period and the price at which the share was sold, if sold prior to the ending date for consideration of damages. If the share was not sold before the measurement date, then the investment loss for Rule 10b-5 purposes is assumed to be the difference between the purchase price per share at the time of purchase minus the average closing price for the 90 days following the Class Period.

45. It is essential that the inflation-per-share analysis be performed in a manner consistent with the event-study analysis. Because stock prices are best modeled as a result of a diffusion process with periodic jumps,[21] events in a case such as this must be analyzed based on percentage movements and not absolute dollar changes, and adjustments must be made for compounding over time. Adjusting for compounding and compression[22] over time is vital to estimating the "but for" price, or true value, at the time

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[21] Alexander, *Market Models*, 2001, at 66-67, 286-287, 320-322, 430-431, 440-442 (discusses the use of the natural log transformation to capture the diffusion process and events to control for jumps in stock prices at specific points in time); Franses, *Time Series Models for Business and Economic Forecasting*, 1998, at 128-130 (discusses the need to control for sudden changes in stock prices); Tsay, *Analysis of Financial Time Series*, 2002, at 16 (shows returns based on daily log returns and percentage returns) and 244 (discusses a "jump diffusion model proposed by Kou (2000)" to model stock price movements).
[22] Compression is equivalent to saying the "bigger they are the harder they fall." The higher the stock price

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of purchase. The so-called dollar-drop method, while used by some experts in securities litigation, is, therefore, inconsistent with the academic literature on modeling stock-price movements and is often an inappropriate method for determining inflation per share at the time of purchase because it mistakenly assumes that the dollar decline associated with a corrective disclosure is exactly equal to the dollar decline that would have occurred had the "truth" been disclosed at the time of purchase. The failure of the dollar drop methodology to adjust for changes in market, industry and non-fraud-related factors renders the dollar drop method inappropriate for calculating damages in this case.[23] Only in some limited situations (not present here) or by chance will the dollar drop associated with a corrective disclosure be equivalent to the dollar decline that would have occurred at the time of purchase. It can be shown by counter-example that the dollar drop method will yield results that are illogical in a case such as this. The dollar drop method will systematically underestimate the inflation per share damages when industry and company share prices have been generally declining throughout the class period and will systematically overestimate inflation per share damages when industry and company share prices have been rising throughout the class period.

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the more room it has to fall. The following example illustrates the principle of compression. Suppose two events of equal importance result in a loss of 75% in the share price. The temptation is to divide the percentage drop in half and say that each event accounts for 37.5% of the decline. If one of the events was foreseeable and actionable earlier in time and the other unrelated to the Complaint, then this simplistic approach would say that the inflation in the share price prior to the event is 37.5%. However, two 37.5% events would combine to only cause a 61% decline in the share price $(1-(1-.375)*(1-.375))$. The individual percentage impact of each event would have to be 50% in order for the total decline after the two events to be 75%. Mathematically, $75\% = 1-(1-.5)*(1-.5)$.

[23] Finnerty and Pushner, "An Improved Two-Trader Model for Estimating Damages in Securities Fraud Class Actions," also published in *Stanford Journal of Law, Business and Finance*, 2002, at 8-11 (discusses adjusting the corrective events over time for a "comparable-stock index that recognizes both industry and market-wide influences" and adjusting for "firm-specific factors that can be directly attributed to company announcements that are not related to the fraud" using the backwardization approach based on percentage returns, not absolute dollar changes).

46. Additionally, valuation theory bases common share prices on factors such as expected growth, earnings, and cash flow using various valuation multiples, which vary over time with changes in market sentiment, economic growth rates, interest rates, and perceptions of industry and market risk. Thus, a reduction in earnings per share on one day is not likely to have exactly the same dollar effect on a different day during the study period.

47. The concept of "equivalent disclosure" requires that percentage declines associated with later corrective disclosures be translated into percentage declines that would have occurred earlier in time had the alleged truth been disclosed in a timely manner.

48. I begin the inflation analysis with the selection of relevant events. Relevant events are those that either would not have occurred but for the allegations in the Complaint (typically the inflationary events) or would have occurred (or equivalent disclosure[24] events would have occurred) at or before the beginning of the Class Period but for the allegations in the Complaint (typically the corrective events). Relevant corrective events in 2000 are generally the "meaningful" events (t-statistic greater than one or events that appear in sequence) that caused the inflation in Xcelera's share price in relative (percentage) terms to be reduced. The relevant events are identified in the Relevant Events column in Exhibit B-1 by the number 1.

49. The relevant corrective events are limited in this case to the leakage of information and disclosures regarding the potential dilution in Xcelera's shares by the JAM agreement. I specifically excluded the events associated with Xcelera's stock price

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[24] Cornell and Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," *UCLA Law Review*, June 1990, at 894-897.

declines on July 11 and 13, 2000, because they were associated with the first disclosure of the potential tax on earnings to US shareholders and the negative analyst report by Lazard Freres. I similarly did not include any of the insider selling events due to their relative dispersion and timing.

50. The first relevant event was during trading on August 1, 2000. Initially, the press release of Xcelera issued after the close of business on July 31, 2000, was well received, and the share price of Xcelera rose to as high as $20 per share on August 1, 2000 from a closing price of $15.125 on July 31, 2000. The discovery of the disclosure regarding the potential liability and dilution in the JAM agreement was noted in a Lazard Freres analyst report issued during the day on August 1, 2000 and then was commented on by others in news reports after the close of trading on August 1, 2000. Therefore, selling damages are assumed to begin on August 1, 2000. Additional commentary on August 2, 2000, led to an additional loss in Xcelera's share price on that day. Given the modest net increase in Xcelera's share price on August 1, 2000, I assumed damages primarily associated with the 12.8% relative decline on August 2, 2000.[25]

51. The second corrective event occurred after the close of trading on August 8 and on August 9, 2000, when a negative news article identified further the potential dilution associated with the JAM agreement. This was then reported on Bloomberg and reported by others throughout trading on August 9, 2000.

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[25] It should be noted that Xcelera's share price fell meaningful amounts in both absolute and relative terms on July 31, 2000, and August 3, 2000. However, there were a number of identified reasons for those declines. Therefore, out of conservatism, I did not consider the relative declines in Xcelera's share price on those days in the inflation per share and damages analysis, even though some portions of the declines were associated with negative anticipation of the earnings news and additional investor analyses of the dilution associated with the JAM agreement that could be attributable to damages.

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52. Finally, on November 29, 2000, the Company disclosed in a Form 6-K the actual JAM agreement. This agreement confirmed investor's fears and led to another significant decline in Xcelera's share price.

53. The value line analysis is summarized in Exhibit C in spreadsheet form in detail by day. The value line per share is determined using the residual-returns method (also known as the backwardization method). The residual-returns method is commonly used to determine inflation per share in securities litigation.[26] It assumes (consistent with my prior analyses and conclusions) that the relevant events should have occurred earlier in time and would have been reflected in the stock price of Xcelera earlier in time or at the beginning of the Class Period had the information as alleged by Plaintiff been disclosed.

54. In Exhibit C, the column labeled "Relevant Event" is the relevant portion (1.0 indicating relevant and 0.0 indicating not relevant) of the relative decline (or increase) in the stock price at a given date that should have occurred at a prior date given the allegations in the Complaint. The "Event Effect" column is the effect of each identified event as measured using the daily regression window (expressed in natural log format). The "True Value Percent" column in Exhibit C provides a measure of the "true value line" as a percentage of Xcelera's closing stock price on each trade day. The "True Value Percent" column is calculated by working backward from November 29, 2000, (the last significant relevant event following the Class Period) assuming that the portion of

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[26] Cornell and Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," *UCLA Law Review*, June 1990, at 899-900; Koslow, "Estimating Aggregate Damages in Class Action Litigation Under Rule 10b-5 for Purposes of Settlement," *Fordham Law Review*, April 1991, at 819-825; Alexander, "The Value of Bad News in Securities Class Actions," *UCLA Law Review*, 1994, at 1426-1427; Finnerty and Pushner, "An Improved Two-Trader Model for Estimating Damages in Securities Fraud Class Actions," also published in *Stanford Journal of Law, Business and Finance*, 2002, at 8-11 (discusses adjusting the corrective events over time for a "comparable-stock index that recognizes both industry and market-wide influences" and adjusting for "firm-specific factors that can be directly attributed to company announcements that are not related to the fraud" using the backwardization approach based on percentage returns, not absolute dollar changes).

each relevant event (as shown in the "Relevant Event" column) would have been previously foreseen at the beginning of, prior to or earlier during the Class Period.

55.   Multiplying the "True Value Percent" column by Xcelera's Closing Price ("Xcelera Price" column) on each trade day results in the Value Line in Exhibit C. Inflation per share is merely the difference between Xcelera's actual share price and the Value Line on each trade day. The Composite Index in Exhibit C was derived by setting it equal to Xcelera's share price on December 31, 2000, and working backwards in time. A comparison of the Composite Index and the Value Line with Xcelera's share price is shown from April 28 to December 31, 2000 in the chart included in Exhibit C.

56.   By limiting the relevant events to those with at least a meaningful effect and not fully accounting for the leakage events, the inflation per share calculation implied in Exhibit C is conservative and does not fully capture the relative decline in Xcelera's share price in the days immediately around the corrective events. However, the overall estimated decline attributable to the corrective information and the potential contingent liabilities associated with the corrective information does correspond with the prior dilution analysis. In total, the cumulative relative decline in Xcelera's share price associated with identified corrective events was approximately 36%, or more than one-third of the share price.

Determination of Damages

57.   Damages are determined based on the estimated inflation in the share price and the reported share price at the time of each transaction during the relevant damage period. My analysis limits 10b-5 damages to the lesser of: (i) the difference between the price at which the share was purchased and the price at which it was sold during the Class Period

or presumed sold as of the end of the Class Period; or (ii)'the difference between the inflation per share on the day the share was purchased less the inflation per share on the day the share was sold or presumed sold after the end of the Class Period. Damages for Rule 10b-5 purposes are restricted such that only shares purchased during the Class Period and held until August 1, 2000, (the first major corrective event), are eligible for damages. I also considered limitation of damages based on the purchase price minus the selling price and/or the average closing share price for the 90 days after November 29, 2000, the last corrective disclosure date, as required under the PSLRA.

58. Exhibit D provides an analysis of Xcelera's shares held by investors not excluded from the Class ("shares available to trade") and the purchases and sales of shares during the relevant damage period. Exhibit D also allocates the shares available to trade between identified institutional holdings and "non-institutional" holdings over time. The various SEC filings and reports were used as a basis for this analysis. The analysis begins on March 31, 1999, and continues through February 28, 2001 (beyond the end of the 90-days following the end of the Class Period). The net trading volume is reduced from the reported AMEX trading volume by 24%. Specialist activity typically represents approximately 10% to 14% of trading volume. Intraday trading by other traders generally represented approximately 10% to 15% of the remainder.[27]

59. Insider and affiliate trades were specifically considered when identified in SEC filings or otherwise were allocated over time based on trading volume. The short interest is typically reported at approximately the 15th of each month. The changes in the short

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[27] During early 2000, intraday trading represented approximately 15% of total trading volume on NASDAQ and a smaller percentage (10% or less) on the AMEX and NYSE according to information obtained from publications and from Instinet. However, intraday trading was substantially greater for companies with net daily trade volumes in excess of 1 million shares and Intraday trading fell substantially in the latter half of 2000. After mid-2001, intraday trading has accounted for under 10% of NYSE volume.

position on each trade day between each reporting date were allocated based on trade volume.

60. I prepared an analysis applying NERA's multi-trader model for determining aggregate damages.[28]   In estimating aggregate damages for reporting institutions I allocated purchases and sales pro rata based on trading volume between the quarterly holding periods and deducted such purchases and sales from the purchases and sales and holdings of non-reporting shareholders.   Damages for institutional purchases were calculated using the last-in-first-out method.[29] As can be seen in Exhibit D, identified institutional shareholders generally held a more limited portion of the float and non-institutional shareholders held most of the shares available to trade during the Class Period. I applied standard assumptions regarding the distribution of short-term and long-term shareholders as set forth in NERA's working paper on this issue.[30]

61. Combining the multi-trader trading model discussed in the prior paragraph with the inflation per share and price series for Xcelera's share price (based on Exhibit C) provides the estimates of damages summarized in Exhibit E-1 for institutional shareholders and Exhibit E-2 for non-institutional shareholders. The calculations summarized in Exhibits E-1 and E-2 are combined to form Exhibit E-3. On each of the relevant trade dates, Exhibits E-1 and E-2 provide the number of shares purchased on

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[28] Marcia Kramer Mayer, "Best Fit Estimation of Damages Volume in Shareholder Class Actions: the Multi-Sector, Multi-Trader Model of Investor Behavior," NERA Working Paper, October 2000. I have tested this model using Monte Carlo simulation techniques to verify that the institutional damages estimates are consistent and have a relative low rate of error and have used various sensitivity tests (varying the range of plausible parameters derived from various empirical estimates in other cases) to verify that the damages for the non-institutional population are limited.
[29] This is conservative for damages purposes.
[30] Marcia Kramer Mayer, "Best Fit Estimation of Damages Volume in Shareholder Class Actions: the Multi-Sector, Multi-Trader Model of Investor Behavior," NERA Working Paper, October 2000. See, also, Finnerty and Pushner, "An Improved Two-Trader Model for Estimating Damages in Securities Fraud Class Actions," subsequently published in the *Stanford Journal of Law, Business and Finance*, 2003.

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each trade day and the estimated number of shares retained as of February 28, 2001. Selling damages are calculated based on the lesser of inflation losses and investment losses on shares purchased during the Class Period and sold on or after August 1, 2000, and on or before February 28, 2001.[31] Retention damages are based on shares purchased during the Class Period, and retained until the close of trading on February 28, 2001. Each retained share suffered a loss equal to the inflation per share on the day it was purchased less any adjustment for the 90-day period after November 28, 2001. Total damages for the extended Class Period, as proposed, were $352.6 million in Exhibit E-3. This represents estimated damages of $10.87 per damaged share based on an estimated total of 32.4 million damaged shares. As shown in Exhibit E-3, total damages for the certified Class Period were $302.6 million, with approximately 28.4 million damages shares realizing damages of $10.64 per share on average. These estimates have proven to be reasonably accurate when compared against claims data in cases where I have estimated aggregate damages.[32]

62. Damages for insider trading allegations are based on the out-of-pocket losses allocated to shares purchased on the same day or within three trading days after each of the insider sales by the individual Defendant's identified in the Complaint. Insider trading damages are set forth in Exhibit F. As shown in Exhibit F-1, the Defendants sold a total of 3,343,300 shares for approximately $252.5 million. The inflation at the time of sale for these shares totaled approximately $90 million. This represents the excess

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[31] Selling damages are estimated for shares sold after the first identified corrective disclosure or leakage events and before the end of the 90-day period after the end of the Class Period. This extension of the model allows me to address the relevant events after the Class Period and specifically capture the loss limitation rules specified in the PSLRA. The average closing price to the date of sale did increase during a portion of the 90-day period such that selling damages were slightly reduced by the PSLRA loss limitation rules and the out-of-pocket loss limitation rule.

[32] Generally, claims are between 75% and 100% of estimated damages in the larger cases that I have worked on such as Computer Associates, Broadcom, Dynegy, AOL Time Warner, and Raytheon.

proceeds realized from the sales that would not have been realized had the relevant truth been disclosed regarding the JAM agreement. In Exhibit F-2, sales of call options are summarized. The call options sold would have been essentially worthless had the relevant truth been disclosed. Thus, the excess proceeds on the sale of 36,532 contracts (100 shares per contract) were, thus, approximately $16 million.

63. These opinions may be altered by further review and reflection on the information provided and upon receipt of additional information. I anticipate reviewing other expert reports filed in this matter, providing rebuttal testimony (if appropriate) and presenting revised analyses (if appropriate). The methods and models set forth in this report can be adjusted to accommodate various alternative assumptions and effects of such alternatives on inflation per share and damages calculations may be presented in demonstrative exhibits.

Executed this 26th day of April 2007, at Dallas, Texas.

Scott D. Hakala, Ph.D., CFA